



# Selected bibliography

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ANTONI GURGUÍ

Innovation is without any doubt a fashionable subject. Specific bibliography is accordingly vast. In the following some suggestions on literature are given, in some case with comments, on documents that can be of interest on this matter, especially from a Catalan perspective. However, the new opportunities provided by ICT force us to set aside any pretension of being exhaustive, and the references below are not necessarily the most important ones.

## Books

ARBONÍES ORTIZ, A. L. *Innovación o evolución: metáfora evolutiva de la empresa*. Díaz de Santos, 2007.

AYMERICH, R. *Fet a casa. La innovació a les empreses catalanes*. Barcelona: Viena Edicions, 2007.

Neither Catalonia in general nor our specific environment lie at the origin of the bulk of scientific and technological innovation in the last decades. If we add our modest R&D indicators and statistics, we may fall prey to existential pessimism, which does not fit our innovation potential either. This book, written by a journalist, is a good compilation of experiences from Catalonia that prove that nothing prevents us from being ambitious as to the innovation-based economy. It is just about willingness and acting accordingly.

BURGELMAN, R. A., et al. *Strategic Management of Technology and Innovation*. McGraw Hill Higher Education, 2003, 4th edition.

CARLSON, C. R.; WILMOLT, W. W. *Innovation: The Five Disciplines for Creating What Customers Want*. Crown Business, 2006.

CARR, N. G. *Las tecnologías de la información ¿Son realmente una ventaja competitiva?*. Barcelona: Empresa Activa, Urano, 2005.

Although the answer to the question in the title of this book («Is IT really a competitive advantage?») is clearly yes, the extraordinary power of ICT has often served to create frustrated expectations. This book explains very well that it is not enough to fill desks with computers or buy sophisticated applications to become competitive, but it is indispensable to adapt organisations and processes – and to select suppliers carefully – to take full advantage of these technologies. Finally, we need to understand that we cannot envisage them as being «new» since everybody uses them, so the question is not so much: what advantages do they offer? but rather: how long will my company last if I do get the best out of them?

CHESBROUGH, H. W. *Open Business Models: How to Thrive in the New Innovation Landscape*. Harvard Business School Press, 2006

CHRISTENSEN, C. *Seeing What's Next: Using Theories of Innovation to Predict Industry Change*. Harvard Business School Press, 2004.

DAVILA, T.; EPSTEIN, M. J.; SHELTON, R. *Making Innovation Work. How to Manage It, Measure It, and Profit from It*. New Jersey: Wharton School Publishing – Pearson Education 2006.

A practical work on the subject, coauthored by an IESE professor (TD). Having been very well accepted, it has been translated to a dozen languages. Its very direct approach is geared to business application and forsakes any sort of academicism or superfluous intelligence, which led Lew Platt (CEO of Boeing, formerly of HP) to assert: «This is the book I would like to have read thirty years ago.»

DORF, R. C.; BYERS, T. H. *Technology Ventures: From Idea to Enterprise*. Columbus, Ohio: McGraw Hill, 2006.

DRUCKER, P. *Innovation and Entrepreneurship*. New York: Harper & Row, 1985.

HAMEL, G. *Leading the Revolution*. Penguin Group, 2000.

KIM, W. C.; MAUBORGNE, R. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*. Harvard Business School Press, 2005.

MARINA, J. A. *La Creación Económica*. Deusto, 2003.

NARAYANAN, V. *Managing Technology and Innovation for Competitive Advantage*. Prentice-Hall Longman, 2001.

NUENO, P.; KALTHOFF, O.; NONAKA, I. *La Luz y la Sombra*. Deusto, 1999.

ORTÍN, P.; SANTAMARÍA, L. *El factor humano en la innovación: dilemas organizativos para los departamentos de I+D*. Centre d'Economia Industrial, 2006.

PIQUÉ, J. M.; GONZÁLEZ, S.; BELLAVISTA, J.; ALVES, V. *Science and Technology Parks and Universities in the Incubation System of Technology-based Companies: Contribution from the Triple Helix Model*. V Triple Helix Conference, Turin, 2005

PONTI, F.; FERRÀS, X. *Pasión por innovar. De la Idea al Resultado*. Barcelona: Granica, 2006.

A good popular science text to clarify concepts, especially in the second part, which systematises very well the wide spectrum of things that have to do with the function of innovation and are often perceived in a very restrictive way, limited only to some areas or technologies.

SCHILLING, M. A. *Strategic Management of Technological Innovation*. New York: McGraw Hill Irwin, 2007.

SHENHAR, A. J.; DVIR, D. *Reinventing Project Management: The Diamond Approach to Successful Growth and Innovation*. Harvard Business School Press Books, 2007.

SOLÀ, J.; SAEZ, X.; TERMES, M. *La innovació i l'R+D industrial a Catalunya*. Barcelona: Departament de Treball i Indústria, Papers d'Economia Industrial, 23, 2006.

SUBIRÀ, A.; GURGUÍ, A. *Políticas para la competitividad. Una experiencia de gobierno*. Barcelona: Antoni Bosch Editor, 2007.

Although this book deals in general with competitiveness policies, its largest chapter is devoted precisely to innovation. It describes the development of a policy specifically designed for Catalonia. Although its principles are kept quite general, it gives a view that, refraining from stereotypes, is for sure controversial but based on a long-standing international experience, having been used to set out the first innovation plan in Catalonia.

## Monographs

AHO, E. et al. *Creating an Innovative Europe. Report of the independent expert group on R+D & Innovation*. EU, 2006 ([http://ec.europa.eu/invest-in-research/action/2006\\_ahogroup\\_en.htm](http://ec.europa.eu/invest-in-research/action/2006_ahogroup_en.htm)).

Faced with the poor results achieved in trying to meet the 2000-2010 Lisbon goals, the European Union appointed in 2005 an independent expert group under the leadership of Ensko Aho – the former prime minister of Finland – to draft a framework document on innovation in Europe. Though brief and not intending to diagnose all





problems, it contains a set of relevant thoughts on what is needed to match the most innovating economies. This group of four experts – including a Catalan, A. Subirà – was later appointed to proceed with the analysis.

BLANC, C. *Pour un écosystème de la croissance. Rapport au Premier Ministre*. Assemblée Nationale de France (<http://www.ecosysteme-croissance.com>).

BEFFA, J.-L. *Pour une nouvelle politique industrielle*. 2005 (<http://www.ladocumentationfrancaise.fr/rapports-publics/054000044/index.shtml>). France is one of the world's leading economies, yet also a good example of how the typical stiffness of old Europe affects competitiveness. The French government is well aware of that, and the two reports mentioned here are a result of two tasks commissioned within a short period by the Prime Minister and the President of the Republic. Both authors have business experience – the one as CEO of Air France, the other as CEO of the Saint-Gobain group – but come to different conclusions. While one turns around this ecosystem concept, the other focuses more on the relevance of big national champions. Blanc bases a significant part of his report on the Catalan experience, quite an unheard case of taking example from across the Pyrenees. It shows nonetheless how different approaches fully agree in one thing: the key role of innovation.

BUSOM, I. *La situació de la innovació a Catalunya*. CIDEM, 2006.

COUNCIL ON COMPETITIVENESS. *Innovate America*. National Innovation Initiative Report 2004 (<http://innovateamerica.org>).

Although the American economy is one of the most innovating and competitive ones, the USA are also concerned with the role of R&D in maintaining competitiveness. This report is a clear demonstration of this obsession and the measures proposed to strengthen such activity in the world's economic powerhouse.

JARUZELSKI, B.; DEHOFF, K. *The customer connection: the global innovation 1000*. Strategy + Business Maga-

zine, 2007 ([www.strategy-business.com](http://www.strategy-business.com), online magazine on strategy and competitiveness).

SCHRAMM, C. et al. *Innovation Measurement. Tracking the State of Innovation in the American Economy*. The Advisory Committee on Measuring Innovation in the 21<sup>st</sup> Century Economy, January 2008 ([http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1090630](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1090630)).

Discussions on innovation are usually based on figures the meaning of which is not clear at all. The R&D investment rate, for instance, is quite irrelevant without any specific explanation of the industry or the business structure and size. This document is a good example of the problem of indicators and, though not solving the issue, gives some recommendations allowing to make progress in this difficult matter.

*The Analysis of the 2006 EU R&D Investment Scoreboard*. DG JRC and DG RTD of the European Commission, 2007.

## Journals

*Economics of Innovation & New Technology*

*Harvard Business Review*

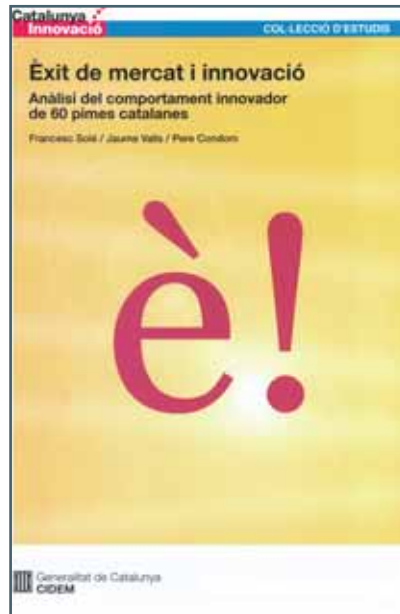
*International Journal of Innovation Management*

*MIT Technology Review*

A classic on the latest developments in new technologies in their widest sense, not restricted to ICT as usually perceived. Also accessible in the internet on: <http://www.technologyreview.com>.

*Nature*

Both this journal and *Science* are the most appreciated windows to introduce the main scientific developments worldwide. Although its central part are its articles and papers – very specific and of high level – an important part of each (weekly) issue presents the main advances and trends in science and technology. They are doubtless an absolute landmark for those wishing to know in-depth what is on in research.



## Science

### *The Economist*

The top periodical publication with an economic background. Given the consensus existing in economics on the impact of innovation, it is not surprising that an important part of the content of this weekly magazine is devoted to subjects related to R&D. However, this consensus also causes the drawbacks of any fashionable subject, namely the lack of accuracy innovation issues are often dealt with. *The Economist* is a model of how to analyse things without slipping into superficiality or lack of accuracy.

## ACC1Ó CIDEM|COPCA publications

Innovation at a company is not the result of some manager being occasionally inspired. An innovating company is that having a clear strategy to this respect and a specific scheme applied to the whole organisation to give ongoing relevance to the best ideas developed at any level. As happens with quality, which is easy to understand but re-

quires a methodology to be implemented – ISO, EFQM or any other standard – innovation requires supporting tools to assist in its implementation. For all those not wishing to reinvent the wheel but preferring to focus their efforts directly on a specific application in their organisation, hereunder follows a list of a set of ACC1Ó CIDEM|COPCA publications that can be very useful to start adapting companies to this important challenge. Most of them are on the ACC1Ó CIDEM|COPCA website and can be downloaded free of charge.

*Innovation management: diagnose* (1999)

*Project management* (2002)

*Practical cases of innovation management* (2001-2004)

*Product development: design management* (2002)

*Market success and innovation* (2002)

*Innovation in production and logistics* (2003)

*Innovation in marketing and sales* (2003)

*Knowledge management* (2003)

## Links

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***www.competitiveness.org*** (The Competitiveness Institute)

***www.isc.hbs.edu*** (Institute for Strategy & Competitiveness, Harvard Business School)

***http://web.mit.edu*** (Massachusetts Institute of Technology)

***www.cidem.com*** (ACC1Ó CIDEM|COPCA)

***www.sri.com*** (Stanford Research Institute)

***www.tekes.fi*** (Finnish Funding Agency for Technology and Innovation)

***www.vinnova.se*** (Swedish Innovation Agency)

***www.dti.gov.uk*** (UK Department of Trade and Industry)

***www.e-aidit.com*** (Agency for tax accreditation of R&D projects)

***www.cdti.es*** (Spanish Centre for the Development of Industrial Technology)

***trendchart.cordis.europa.eu/*** (Innovation indicators, EU)

### ANTONI GURGUÍ

PhD in Industrial Engineering, M.Sc.E., Fulbright fellow and postgraduate in Subterranean Hydrology and Public Management. He has worked in the industry, university and Catalan administration, being Director General of Industry. Author of different books and publications on energy, transport, regional planning and industry.

